
New Hampshire
*Department of Agriculture,
Markets & Food*

Myriad of Soil Products Offer Promise of Improved Plant Growth

By Richard Uncles, Director
Division of Regulatory Services

“Soil Amendment” is the broad term for the many products that are applied to crops, gardens and lawns to improve soils or plant growth. They include fertilizers and liming materials. Fertilizers provide one or more of the 18 elements needed for plant growth. Liming materials change soil chemistry by decreasing acidity. The quality and labeling of fertilizers, liming materials and potting soils are regulated by state laws administered by the New Hampshire Department of Agriculture, Markets & Food (NHDAMF).

Another category of soil amendments includes compost, peat moss, humus and similar products. These materials provide organic matter to existing soils to improve soil structure so it may hold water and nutrients better. Topsoil may be brought in where none existed, or to amend poor or thin soils. These types of soil amendments are not specifically addressed by the state’s agricultural laws.

Because there are no required quality standards for compost and topsoil type products, it’s important to be an informed consumer. Always ask the seller what ingredients go into the compost they are offering. When buying topsoil, ask the source of the material, whether fertilizer or lime has been added, or, if it is manufactured topsoil, question what the ingredients are. Sellers of compost or topsoil should have test reports to indicate a typical analysis, which includes the pH and nutrient levels. It’s best to take a look at the product before buying over the phone. Look for stones, roots, and foreign material in topsoil. A lower price may justify raking out the extraneous material yourself. Ask if the product is guaranteed if plants perform poorly.

Packaged soil amendment products should be labeled with either the volume or weight of the contents as well as the name and address of the manufacturer. If these products are purchased in bulk, ask for a receipt with every load. A receipt or invoice should provide, at a minimum, the quantity delivered, the name and address of the seller, and the price paid.

Bark mulch can also be considered a soil amendment. While not usually incorporated directly into the soil, bark products eventually become part of the soil and can effect plant growth. Bark mulches come from a variety of softwood tree species including pine, hemlock, fir, spruce and cedar. Some contain a significant quantity of wood. Most of the highly colored bark mulches are dyed, sometimes to disguise wood chips as bark. Mulches may also have been treated with insecticides. Ask the seller for this information if it is of concern to you.

There is another category of soil amendments whose benefits are less clear. Among them, microorganisms, blue-green algae, humic acids, vitamins, and amino acid compounds. These products usually make vague or general claims about enhancing plant growth or soil health. Most often there is no university or non-partial research to demonstrate the material’s benefits. While these products probably do no harm, they may be a waste of time and money.

Consumer complaints about deceptive business practices may be directed to the Department of Justice’s Consumer Protection Bureau. If there are questions or complaints about proper measure, they can be addressed by NHDAMF’s Division of Weights & Measures, or for fertilizer, lime and potting soils, by the Division of Regulatory Services.

For more information on this topic and others, contact Richard Uncles, Division of Regulatory Services, NH Dept. of Agriculture, and Markets & Food at tel. 271-3685, email: runcles@agr.state.nh.us or visit the website at www.agriculture.nh.gov.